Wisconsin
Department of Commerce

Evaluation # 200203-W (Replaces 960046-W)

Safety & Buildings Division
201 West Washington Avenue
P.O. Box 2658
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Wisconsin
Building Products Evaluation

Material	NJ, NJH and NJU Series Wood I-Joists
Manufacturer	Nascor Incorporated 1212-34th Avenue S.E. Calgary, Alberta T2G1V7 Canada

LICENSEES:

All-Fab Building Components
Hwy. # 7 and Propellant Rd.
P.O. Box 189
Stony Mountain, Manitoba
R0C 3A0 CANADA

SCOPE OF EVALUATION

The wood I-Joists (NJ, NJU and NJH Series), manufactured by Nascor Incorporated, were evaluated for use as blocking panels, floor, ceiling, roof, and rim joists in accordance with **ss. Comm 53.60** and **53.61 (2)** of the current edition of the Wisconsin Administrative Building and Heating, Ventilating and Air Conditioning Code.

The wood I-Joists (NJ, NJU and NJH Series), manufactured by Nascor Incorporated, were evaluated for use as blocking panels, floor, ceiling, roof, and rim joists in accordance with **ss. Comm 21.02 (3)(a)** and **21.19** of the current Wisconsin Administrative Uniform Dwelling Code (for 1 & 2 family dwellings).

The wood I-Joists (NJ, NJU and NJH Series), manufactured by Nascor Incorporated, were evaluated for use as blocking panels, floor, ceiling, roof, and rim joists in accordance with **ss. 2301.2**, **2301.2.1**, **2303.1**, **2303.1.2**, **2306.1** and **2306.1.1** of the Wisconsin Amended ICC 2000 Code (**eff. 7/01/02**).

DESCRIPTION AND USE

Nascor Wood I-Joists (NJ, NJU and NJH Series) for use in residential and light commercial construction as either joists or rafters. The joists are prefabricated with solid-sawn lumber chords and oriented strand board (OSB) webs. The web-to-chord connection is a glued taper-fitted joint. The web-to web connection of the OSB panels is a full-depth, taper-shaped glued joint. The NJ, NJU and NJH Series Joists are uniform in depth and may be fabricated to a maximum length of 48 feet.

The **NJ Series** Joists are used as the load-bearing members of floor and roof systems. It is a "wood-I section" of 9 1/4" (235 mm), 9 1/2" (241 mm) and 11.875" (302 mm) depths and consists of 2x3 (38 x 64 mm) chords vertically and a 3/8" (9.5 mm) thick oriented strand board (OSB) web. The chords are routed to accept the web. The chords and webs are joined with a phenol resorcinol adhesive.

The **NJH Series** Joists are used as the load-bearing members of floor and roof systems. It is a "wood-I section" of 9 1/2" (241 mm), 11.875" (302 mm), 14" (356 mm), and 16" (406 mm) depths and consists of 2x3 (38 x 64 mm) chords horizontally and a 3/8" (9.5 mm) thick oriented strand board (OSB) web. The chords are routed to accept the web. The chords and webs are joined with a phenol resorcinol adhesive.

The **NJU Series** Joists are used as the load-bearing members of floor and roof systems. It is a "wood-I section" of 9 1/2" (241 mm), 11.875" (302 mm), 14" (356 mm), 16" (406 mm), and 18" (457 mm) depths and consists of 2x4 SPF No.2+ (38 x 89 mm) chords horizontally and a 3/8" (9.5 mm) thick oriented strand board (OSB) web. The chords are routed to accept the web. The chords and webs are joined with a phenol resorcinol adhesive.

The joist chords are S-P-F. kiln-dried #2 or better lumber. The web used in the fabrication of the NASCOR NJ, NJH and NJU Series Joist is Oriented Strand Board (OSB) and shall conform to the American Plywood Association (APA) specifications for Exposure 1, Structural 1 rated, PRP-108 and Canadian Softwood Plywood CSA 0325. Adhesives are exterior type which comply with ASTM D2559 and as further specified in the Nascor manufacturing standards.

Nascor NJ, NJH and NJU Series Wood I-Joists

NJ SERIES NJH SERIES NJU SERIES

NJ, NJU and NJH Series Allowable Design Properties are shown in **Table 1**.
Design: Nascor NJ, NJU and NJH Series Joists shall be designed and installed complying with the following:

Table 1 – DESIGN PROPERTIES FOR NASCOR JOISTS[1,2,3]

Joist Type	Depth (inches)	Weight (lb./ft.)	Allowable Moment (ft.-lbs.)	Allowable Shear (lbs.)	EI ($lb.-in.^2 \times 10^6$)	Shear Constant K ($lbs \times 10^6$)
NJ925	9 ¼	2.1	2,200	950	123	11.83
NJ10	9 1/2	2.2	2,320	970	136	12.70
NJ12	11 7/8	2.4	2,850	1,070	243	14.50
NJH10	9 1/2	2.3	2,420	1,000	175	11.60
NJH12	11 7/8	2.7	3,400	1,140	298	14.50
NJH14	14	3.0	5,000	1,350	430	15.08
NJH16	16	3.3	5,940	1,510	584	16.93
NJU10	9 1/2	2.7	3,040	1,000	240	11.11
NJU12	11 7/8	2.9	4,200	1,140	406	13.75
NJU14	14	3.2	5,600	1,350	594	15.76
NJU16	16	3.4	6,900	1,510	807	17.15
NJU18	18	3.6	8,400	1,600	1,054	20.04

Notes to Table 1:

1. Mid-span deflection of simply supported joists shall be calculated using the following equations:

$$\Delta = \frac{5WL^4}{384EI} + \frac{WL^2}{K}$$ for uniform Loads

$$\Delta = \frac{PL^3}{48EI} + \frac{2PL}{K}$$ for Concentrated Loads at mid-span

Where:

W = Uniform load in pounds per lineal inch
P = Concentrated load in pounds
L = Span in inches
El = Joist Stiffness in lbs-in^2 from Table 1
K = Shear deflection shear constant in pounds from Table 1

2. Allowable shear may be further limited by the allowable end reaction, depending on the joist type and bearing length selected.
3. Joist flanges are No. 2 or better SPF. Web material is 3/8 inch thick OSB.

Table 2 – ALLOWABLE BEARING CAPACITY (Pounds) FOR NASCOR JOISTS

Joist Type	End Bearing Length				Interior Bearing Length			
	1-1/2 inches		2-1/2 inches		3-1/2 inches		5-1/2 inches	
	Without Stiffeners	With Stiffeners	Without Stiffeners	With Stiffeners	Without Stiffeners	With Stiffeners	Without Stiffeners	With Stiffeners
NJ925	950	----	950	----	1900	----	1900	----
NJ10	960	----	970	----	1940	----	1940	----
NJ12	960	----	1070	----	2000	----	2140	----
NJH10	960	1000	1000	1000	2000	2000	2000	2000
NJH12	1000	1140	1140	1140	2200	2280	2280	2280
NJH14	1100	1350	1300	1350	2200	2700	2500	2700
NJH16	1100	1500	1400	1510	2200	2700	2500	3020
NJU10	900	900	1000	1000	1500	2000	2000	2000
NJU12	900	900	1100	1100	1500	2280	2280	2280
NJU14	1200	1200	1350	1350	1500	2500	2500	2700
NJU16	1200	1200	1400	1400	1500	2500	2500	3020
NJU18	1200	1200	1400	1400	1500	2500	2500	3200

Table 3 – ALLOWABLE SPANS FOR NASCOR JOISTS[1,2,3,4,5,6 & 7]

Joist Type	Floor Load (psf)				Floor Load (psf)			
	Live = 40		Dead = 10		Live = 40		Dead = 20	
	Joist Spacing (inches)				Joist Spacing (inches)			
	12	16	19.2	24	12	16	19.2	24
NJ925	17'-5"	15'-11"	15'-0"	13'-8"	17'-5"	15'-4"	14'-0"	12'-6"
NJ10	18'-0'	16'-5"	15'-6"	14'-1"	18'-0"	15'-9"	14'-4"	12'-10
NJ12	21'-7"	19'-1"	17'-5"	15'-7"	20'-1"	17'-5"	15'-11"	14'-3"
NJH10	19'-5"	17'-7"	16'-1"	14'-4"	18'-6"	16'-1"	14'-8"	13'-1"
NJH12	23'-1"	20'-10"	19'-0"	17'-0"	22'-0"	19'-0"	17'-4"	15'-6"
NJH14	25'-11"	23'-7"	22'-3"	20'-8"	25'-11"	23'-1"	21'-1"	18'-10"[5]
NJH16	28'-7"	26'-0"	24'-6"	22'-6"[5]	28'-7"	25'-2"	23'-0"[5]	20'-7"[5]
NJU10	21'-6"	19'-7"	18'-0"	16'-1"	20'-9"	18'-0"	16'-5"	14'-8"
NJU12	25'-5"	23'-2"	21'-2"	18'-11"[5]	24'-5"	21'-2"	19'-4"[5]	17'-3"[5]
NJU14	28'-9"	26'-2"	24'-5"	21'-10"	28'-3"	24'-5"	22'-4"	19'-11"
NJU16	31'-9"	28'-10"	27'-2"	24'-3"[5]	31'-4"	27'-2"	24'-9"	22'-2"[5]
NJU18	34'-7"	31'-6"	29'-8"	26'-9"[5]	34'-7"	29'-11"	27'-4"[5]	23'-3"[5]

Notes to **Table 3**:

1. Table is applicable for single span, simply supported joists subjected to the uniform loads indicated in the table.
2. Spans are based on composite action of glued and nailed sheathing. Spans must be reduced by 12 inches where sheathing is nailed only.
3. Live load deflection is limited to L/360 and total load deflection limited to L/240.
4. Minimum bearing length of 1 ½ inches is required, unless otherwise noted.
5. Minimum bearing length of 2 ½ inches is required.

6. 7% repetitive member increase is included.
7. See also Limitations Section for additional requirements and limitations.

Table 4 – RIM JOISTS

Joist Type	Allowable Axial Compressive Load (plf)
NJ925	2000
NJ10	2000
NJ12	2000
NJH10	2000
NJH12	1500
NJH14	1200
NJH16	1100
NJU10	2000
NJU12	1500
NJU14	1200
NJU16	1100
NJU18	1000

Table 5 –ALLOWABLE RECTANGULAR HOLE LOCATION (ft-in.) for NJ SERIES[1,2,3,4,5,6]

Joist Type	Joist Span (ft-in.)	Hole Height (inches)										
		2	2 ½	3	31/2	3 ¾	4	41/2	5	5 ½	6	6 3/8
		Allowable Hole Location (ft-in.)										
NJ925	6 - 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0						
	8 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0						
	10 – 0	1 – 0	1 – 0	1 – 6	2 – 0	2 – 0						
	12 – 0	1 – 6	2 – 0	2 – 6	3 – 0	3 – 0						
	13 – 2	1 – 0	1 – 0	1 – 6	2 – 6	2 – 6						
	14 – 0	1 – 0	1 – 0	1 – 0	1 – 6	1 – 6						
	15 – 5	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0						
NJ10	6 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0					
	8 – 0	1 – 0	1 – 0	1 – 0	1 – 6	1 – 6	1 – 6					
	10 – 0	1 – 6	1 – 6	2 – 0	2 – 6	2 – 6	2 – 6					
	12 – 0	2 – 6	2 – 6	3 – 0	3 – 6	3 – 6	3 – 6					
	12 – 4	2 – 6	3 – 0	3 – 0	3 – 6	3 – 6	3 – 6					
	13 – 8	2 – 0	2 – 6	3 – 0	3 – 0	3 – 6	3 – 6					
	14 – 0	1 – 0	1 – 6	2 – 0	2 – 6	2 – 6	2 – 6					
	14 – 6	1 – 0	1 – 6	2 – 0	2 – 6	2 – 6	3 – 0					
	15 – 11	1 – 0	1 – 0	1 – 0	1 – 6	1 – 6	1 – 6					
NJ12	6 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 6
	8 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 6	1 – 6	2 – 0	2 – 0
	10 – 0	1 – 0	1 – 0	1 – 0	1 – 6	1 – 6	1 – 6	2 – 0	2 – 6	2 – 6	3 – 0	3 – 0
	12 – 0	1 – 0	1 – 6	2 – 0	2 – 6	2 – 6	2 – 6	3 – 0	3 – 6	3 – 6	4 – 0	4 – 0
	13 – 8	2 – 0	2 – 6	2 – 6	3 – 0	3 – 6	3 – 6	4 – 0	4 – 0	4 – 6	5 – 0	5 – 0
	14 – 0	1 – 0	1 – 0	1 – 0	2 – 0	2 – 6	2 – 6	3 – 0	3 – 6	4 – 0	4 – 0	4 – 6
	15 – 3	1 – 0	2 – 0	2 – 6	3 – 0	3 – 0	3 – 6	3 – 6	4 – 0	4 – 6	5 – 0	5 – 0
	16 –0	1 – 0	1 – 0	1 – 6	2 – 0	2 – 6	2 – 6	3 – 0	3 – 6	4 – 0	4 – 6	4 – 6
	16 – 9	1 – 0	1 – 0	2 – 0	2 – 6	3 – 0	3 – 0	3 – 6	4 – 0	4 – 6	5 – 0	5 – 0
	18 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 6	2 – 0	2 – 6	3 – 0	3 – 6	4 – 0
	19 – 2	1 – 0	1 – 0	1 – 0	1 – 0	1 – 6	2 – 0	2 – 6	3 – 0	4 – 0	4 – 6	4 – 6

NOTES on Table 5:

1. Table is based on a maximum uniform floor loading of 40 psf live and 25 psf dead load.
2. Table is applicable for joist spacing of 24 inches on center or less.
3. Joist span is based on the clear span, distance from inside of the end supports.
4. Hole location is the distance measured from the inside face of the nearest support to the edge of the hole.
5. The maximum hole depth must leave ¼ inch minimum of web material between the top and bottom of the hole and the flange.

6. The maximum allowable hole width (distance parallel to flange) shall be 1-1/2 times the hole depth.

Table 6 –ALLOWABLE ROUND HOLE LOCATION (ft-in.) for NJ SERIES[1,2,3,4,5]

Joist Type	Joist Span (ft-in.)	Hole Height (inches)										
		2	2 ½	3	31/2	3 ¾	4	41/2	5	5 ½	6	6 3/8
		Allowable Hole Location (ft-in.)										
NJ925	6 - 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0						
	8 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0						
	10 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 6						
	12 – 0	1 – 0	1 – 0	2 – 0	2 – 0	2 – 6						
	13 – 2	1 – 0	1 – 0	1 – 0	1 – 6	1 – 6						
	14 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 6						
	15 – 5	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0						
NJ10	6 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0					
	8 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0					
	10 – 0	1 – 0	1 – 0	1 – 0	1 – 6	1 – 6	1 – 6					
	12 – 0	1 – 0	1 – 6	2 – 0	2 – 6	2 – 6	2 – 6					
	12 – 4	1 – 6	1 – 6	2 – 0	2 – 6	2 – 6	3 – 0					
	13 – 8	1 – 0	1 – 0	1 – 6	2 – 0	2 – 0	2 – 6					
	14 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 6					
	14 – 6	1 – 0	1 – 0	1 – 0	1 – 0	1 – 6	1 – 6					
	15 – 11	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0					
NJ12	6 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0
	8 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0
	10 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 6	2 – 0
	12 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 6	2 – 0	2 – 6	3 – 0
	13 – 8	1 – 0	1 – 0	1 – 0	1 – 6	1 – 6	1 – 6	2 – 0	2 – 6	3 – 0	3 – 6	3 – 6
	14 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 6	2 – 0	2 – 6
	15 – 3	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 6	1 – 6	2 – 6	3 – 0	3 – 0
	16 –0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 6	2 – 0	2 – 6
	16 – 9	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 6	2 – 0	3 – 0
	18 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 6
	19 – 2	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0

NOTES on Table 6:

1. Table is based on a maximum uniform floor loading of 40 psf live and 25 psf dead load.
2. Table is applicable for joist spacing of 24 inches on center or less.
3. Joist span is based on the clear span, distance from inside of the end supports.
4. Hole location is the distance measured from the inside face of the nearest support to the center of the hole.
5. The maximum hole depth must leave ¼ inch minimum of web material between the top and bottom of the hole and the flange.

Table 7 –ALLOWABLE RECTANGULAR HOLE LOCATION (ft-in.) for NJH SERIES[1,2,3,4,5,6]

Joist Type	Joist Span (ft-in.)	Hole Height (inches)												
		2	3	4	5	61/4	7	8 3/8	9	10	10 ½	11	12	12 1/2
		Allowable Hole Location (ft-in.)												
NJH10	10 - 0	1 – 0	1 – 6	2 – 6	3 – 0									
	12 – 0	2 – 0	2 – 6	3 – 6	4 – 0									
	12 – 7	2 – 0	3 – 0	4 – 0	4 – 6									
	14 – 0	1 – 6	2 – 6	3 – 6	4 – 6									
	14 – 1	1 – 6	2 – 6	3 – 6	4 – 6									
	15 – 5	1 – 0	2 – 0	3 – 6	4 – 6									
	16 – 0	1 – 0	1 – 0	1 – 6	3 – 6									
	17 - 3	1 – 0	1 – 0	2 – 0	4 – 0									
NJH12	10 - 0	1 – 0	1 – 0	2 – 0	2 – 6	3 – 6	3 – 6	4 – 0						
	12 – 0	1 – 0	2 – 0	3 – 0	3 – 6	4 – 6	4 – 6	5 – 0						
	14 - 0	2 – 0	3 – 0	4 – 0	4 – 6	5 – 6	5 – 6	6 – 0						
	14 – 11	2 – 0	3 – 6	4 – 0	5 – 0	6 – 0	6 – 0	6 – 6						
	16 – 0	1 – 6	2 – 6	3 – 6	4 – 6	5 – 6	6 – 0	6 – 6						
	16 – 8	1 – 6	3 – 0	4 – 0	5 – 0	6 – 0	6 – 6	7 – 0						
	18 – 0	1 – 0	2 – 0	3 – 6	4 – 6	6 – 0	6 – 6	7 – 0						
	18 – 3	1 – 0	2 – 6	3 – 6	5 – 0	6 – 0	6 – 6	7 – 6						
	20 – 0	1 – 0	1 – 0	2 – 6	4 – 0	5 – 6	6 – 0	7 – 0						
	20 – 6	1 – 0	1 – 0	2 – 6	4 – 0	5 – 6	6 – 6	7 – 6						
NJH14	12 – 0	1 – 0	1 – 0	1 – 6	2 – 6	3 – 0	3 – 6	4 – 6	5 – 0	5 – 0	5 – 6			
	14 – 0	1 – 0	1 – 6	2 – 6	3 – 6	4 – 0	4 – 6	5 – 6	6 – 0	6 – 0	6 – 6			
	16 – 0	1 – 6	2 – 6	3 – 6	4 – 6	5 – 0	5 – 6	6 – 6	7 – 0	7 – 0	7 – 6			
	18 – 0	2 – 6	3 – 6	4 – 6	5 – 6	6 – 0	6 – 6	7 – 6	8 – 0	8 – 0	8 – 6			
	18 – 1	2 – 6	3 – 6	4 – 6	5 – 6	6 – 0	6 – 6	7 – 6	8 – 0	8 – 0	8 – 6			
	19 – 9	1 – 0	2 – 6	3 – 6	5 – 0	6 – 0	6 – 6	7 – 6	8 – 0	8 – 6	8 – 6			
	20 – 0	1 – 0	1 – 0	2 – 6	3 – 6	5 – 0	6 – 0	7 – 0	7 – 6	8 – 0	8 – 6			
	21 – 0	1 – 0	1 – 6	3 – 0	4 – 0	5 – 6	6 – 0	7 – 6	8 – 0	8 – 6	9 – 0			
	22 – 0	1 – 0	1 – 0	1 – 0	2 – 6	4 – 0	5 – 0	6 – 0	7 – 6	8 – 0	8 – 6			
	23 - 1	1 – 0	1 – 0	1 – 0	3 – 0	4 – 6	6 – 0	7 – 6	8 – 0	8 – 6	9 – 0			
NJH16	12 – 0	1 – 0	1 – 0	1 – 0	2 – 0	3 – 0	3 – 6	4 – 6	5 – 0	5 – 0	5 – 6	5 – 6	5 – 6	5 – 6
	14 – 0	1 – 0	1 – 0	2 – 0	3 – 0	4 – 0	4 – 6	5 – 6	6 – 0	6 – 0	6 – 6	6 – 6	6 – 6	6 – 6
	16 – 0	1 – 0	1 – 6	3 – 0	4 – 0	5 – 0	5 – 6	6 – 6	7 – 0	7 – 0	7 – 6	7 – 6	7 – 6	7 – 6
	18 – 0	1 – 6	2 – 6	4 – 0	5 – 0	6 – 0	6 – 6	7 – 6	8 – 0	8 – 0	8 – 6	8 – 6	8 – 6	8 – 6
	19 - 9	2 – 6	3 – 6	4 – 6	5 – 6	7 – 0	7 – 6	8 – 6	8 – 6	9 – 0	9 – 0	9 – 0	9 – 6	9 – 6
	20 – 0	1 – 0	2 – 0	3 – 6	4 – 6	6 – 0	6 – 6	7 – 6	8 – 0	8 – 6	9 – 0	9 – 0	9 – 0	9 – 0
	21 – 10	1 – 6	3 – 0	4 – 0	5 – 6	7 – 0	7 – 6	8 – 6	9 – 0	9 – 6	9 – 6	9 – 6	10 – 0	10 – 0
	22 – 0	1 – 0	1 – 0	2 – 6	4 – 0	6 – 0	6 – 6	8 – 0	8 – 6	9 – 0	9 – 6	9 – 6	9 – 6	10 – 0
	23 – 2	1 – 0	1 – 6	3 – 6	5 – 0	6 – 6	7 – 6	8 – 6	9 – 0	9 – 6	10 – 0	10 – 0	10 – 0	10 – 6
	24 – 0	1 – 0	1 – 0	1 – 0	2 – 6	5 – 0	6 – 0	7 – 6	8 – 6	9 – 0	9 – 6	9 – 6	9 – 6	10 – 0
	25 – 6	1 - 0	1 - 0	1 - 6	3 - 6	5 - 6	6 - 6	8 - 6	9 - 0	10 - 0	10 - 0	10 - 0	10 - 6	11 - 0

NOTES on Table 7:

1. Table is based on a maximum uniform floor loading of 40 psf live and 25 psf dead load.
2. Table is applicable for joist spacing of 24 inches on center or less.
3. Joist span is based on the clear span, distance from inside of the end supports.
4. Hole location is the distance measured from the inside face of the nearest support to the edge of the hole.
5. The maximum hole depth must leave ¼ inch minimum of web material between the top and bottom of the hole and the flange.
6. The maximum allowable hole width (distance parallel to flange) shall be 1-1/2 times the hole depth.

Table 8 –ALLOWABLE ROUND HOLE LOCATION (ft-in.) for NJH SERIES[1,2,3,4,5]

Joist Type	Joist Span (ft-in.)	Hole Height (inches)												
		2	3	4	5	61/4	7	8 3/8	9	10	10 ½	11	12	12 1/2
		Allowable Hole Location (ft-in.)												
NJH10	10 - 0	1 – 0	1 – 0	1 – 6	2 – 0									
	12 – 0	1 – 0	2 – 0	2 – 6	3 – 0									
	12 – 7	1 – 6	2 – 0	3 – 0	3 – 6									
	14 – 0	1 – 0	1 – 6	2 – 6	3 – 0									
	14 – 1	1 – 0	1 – 6	2 – 6	3 – 0									
	15 – 5	1 – 0	1 – 0	2 – 0	2 – 6									
	16 – 0	1 – 0	1 – 0	1 – 0	1 – 0									
	17 - 3	1 – 0	1 – 0	1 – 0	1 – 6									
NJH12	10 - 0	1 – 0	1 – 0	1 – 0	1 – 6	2 – 0	2 – 6	3 – 0						
	12 – 0	1 – 0	1 – 0	1 – 6	2 – 6	3 – 0	3 – 6	4 – 0						
	14 - 0	1 – 6	2 – 0	2 – 6	3 – 6	4 – 0	4 – 6	5 – 0						
	14 - 11	1 – 6	2 – 6	3 – 0	4 – 0	5 – 0	5 – 0	5 – 6						
	16 – 0	1 – 0	1 – 6	2 – 6	3 – 0	4 – 0	4 – 6	5 – 0						
	16 – 8	1 – 0	2 – 0	2 – 6	3 – 6	4 – 6	4 – 6	5 – 6						
	18 – 0	1 – 0	1 – 0	2 – 0	3 – 0	4 – 0	4 – 6	5 – 0						
	18 – 3	1 – 0	1 – 0	2 – 0	3 – 0	4 – 6	4 – 6	5 – 0						
	20 – 0	1 – 0	1 – 0	1 – 0	1 – 6	2 – 6	3 – 6	4 – 6						
	20 – 6	1 – 0	1 – 0	1 – 0	1 – 6	3 – 0	3 – 6	4 – 6						
NJH14	12 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 6	3 – 0	3 – 6	4 – 6	5 – 0			
	14 – 0	1 – 0	1 – 0	1 – 0	1 – 0	2 – 0	2 – 6	4 – 0	4 – 6	5 – 6	6 – 0			
	16 – 0	1 – 0	1 – 0	1 – 6	2 – 0	3 – 0	3 – 6	5 – 0	5 – 6	6 – 6	7 – 0			
	18 – 0	1 – 0	1 – 6	2 – 6	3 – 0	4 – 0	4 – 6	6 – 0	6 – 6	7 – 6	8 – 0			
	18 – 1	1 – 0	1 – 6	2 – 6	3 – 0	4 – 0	4 – 6	6 – 0	6 – 6	7 – 6	8 – 0			
	19 – 9	1 – 0	1 – 0	1 – 0	2 – 0	3 – 6	4 – 0	5 – 6	6 – 6	7 – 6	8 – 0			
	20 – 0	1 – 0	1 – 0	1 – 0	1 – 0	2 – 0	2 – 6	4 – 6	5 – 6	7 – 0	7 – 6			
	21 – 0	1 – 0	1 – 0	1 – 0	1 – 0	2 – 6	2 – 6	5 – 0	6 – 0	7 – 6	8 – 0			
	22 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	3 – 0	4 – 6	6 – 0	7 – 0			
	23 - 1	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 6	3 – 6	5 – 6	6 – 6	7 – 6			
NJH16	12 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 6	1 – 6	2 – 6	3 – 0	3 – 6	4 – 0	4 – 0	4 – 6	4 – 6
	14 – 0	1 – 0	1 – 0	1 – 0	1 – 6	2 – 6	2 – 6	3 – 6	4 – 0	4 – 6	5 – 0	5 – 0	5 – 6	5 – 6
	16 – 0	1 – 0	1 – 0	1 – 6	2 – 6	3 – 6	3 – 6	4 – 6	5 – 0	5 – 6	6 – 0	6 – 0	6 – 6	6 – 6
	18 – 0	1 – 0	1 – 6	2 – 6	3 – 6	4 – 6	4 – 6	5 – 6	6 – 0	6 – 6	7 – 0	7 – 0	7 – 6	7 – 6
	19 - 9	1 – 6	2 – 6	3 – 6	4 – 0	5 – 0	5 – 6	6 – 6	7 – 0	7 – 6	7 – 6	8 – 0	8 – 6	8 – 6
	20 – 0	1 – 0	1 – 0	1 – 6	2 – 6	3 – 6	4 – 6	5 – 6	6 – 0	6 – 6	7 – 0	7 – 6	7 – 6	8 – 0
	21 – 10	1 – 0	1 – 6	2 – 6	3 – 6	4 – 6	5 – 0	6 – 6	7 – 0	7 – 6	8 – 0	8 – 0	8 – 6	9 – 0
	22 – 0	1 – 0	1 – 0	1 – 0	1 – 6	3 – 0	4 – 0	5 – 6	6 – 0	6 – 6	7 – 0	7 – 6	8 – 0	8 – 0
	23 – 2	1 – 0	1 – 0	1 – 0	2 – 6	3 – 6	4 – 6	6 – 0	6 – 6	7 – 0	7 – 6	8 – 0	8 – 6	9 – 6
	24 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	2 – 0	4 – 0	4 – 6	5 – 6	6 – 0	6 – 6	7 – 6	7 – 6
	25 – 6	1 - 0	1 - 0	1 - 0	1 - 0	1 - 6	3 - 0	4 - 6	5 - 6	6 - 6	7 - 0	7 - 6	8 - 6	8 - 6

NOTES on Table 8:

1. Table is based on a maximum uniform floor loading of 40 psf live and 25 psf dead load.
2. Table is applicable for joist spacing of 24 inches on center or less.
3. Joist span is based on the clear span, distance from inside of the end supports.
4. Hole location is the distance measured from the inside face of the nearest support to the center of the hole.

5. The maximum hole depth must leave ¼ inch minimum of web material between the top and bottom of the hole and the flange.

Table 9 –ALLOWABLE RECTANGULAR HOLE LOCATION (ft-in.) for NJU SERIES[1,2,3,4,5,6]

Joist Type	Joist Span (ft-in.)	Hole Height (inches)											
		2	4	5	6	7	8 3/8	10	10 ½	12	12 1/2	13	14 1/2
		Allowable Hole Location (ft-in.)											
	12 - 0	2 – 0	3 – 6	4 – 0	4 – 6								
	14 – 0	3 – 0	4 – 6	5 – 0	5 – 6								
	14 – 1	3 – 0	4 – 6	5 – 0	5 – 6								
NJU10	15 – 9	2 – 6	4 – 6	5 – 6	6 – 0								
	16 – 0	1 – 0	3 – 6	4 – 6	5 – 6								
	17 – 3	1 – 6	4 – 6	5 – 6	6 – 0								
	18 – 0	1 – 0	3 – 0	4 – 0	5 – 0								
	20 - 0	1 – 0	4 – 0	5 – 0	6 – 0								
	14 - 0	2 – 0	4 – 0	4 – 6	5 – 6	5 – 6	6 – 6						
	16 – 0	3 – 0	5 – 0	5 – 6	6 – 6	6 – 6	7 – 6						
	16 - 7	3 – 0	5 – 0	6 – 0	6 – 6	7 – 0	7 – 6						
	18 – 0	2 – 6	4 – 6	5 – 6	6 – 6	7 – 0	7 – 6						
NJU12	18 – 7	2 – 6	5 – 0	6 – 0	6 – 6	7 – 6	8 – 0						
	20 – 0	1 – 6	4 – 6	5 – 6	6 – 6	7 – 6	8 – 0						
	20 – 4	2 – 0	4 – 6	6 – 0	7 – 0	7 – 6	8 – 6						
	22 – 0	1 – 0	3 – 6	5 – 0	6 – 6	7 – 0	8 – 0						
	23 – 6	1 – 0	4 – 0	5– 6	7 – 0	8 – 0	9 – 0						
	16 – 0	1 – 6	3 – 6	4 – 0	5 – 0	5 – 6	6 – 6	7 – 0	7 – 6				
	18 – 0	2 – 6	4 – 6	5 – 0	6 – 0	6 – 6	7 – 6	8 – 0	8 – 6				
	19 – 2	3 – 0	5 – 0	6 – 0	6 – 6	7 – 6	8 – 0	8 – 6	9 – 0				
	20 – 0	1 – 6	4 – 0	5 – 0	6 – 0	7 – 0	8 – 0	8 – 6	9 – 0				
NJU14	21 – 5	2 – 0	5 – 0	5 – 6	6 – 6	7 – 6	8 – 6	9 – 6	9 – 6				
	22 – 0	1 – 0	3 – 6	5 – 0	6 – 0	7 – 0	8 – 0	9 – 0	9 – 6				
	23 – 6	1 – 0	4 – 0	5 – 6	6 – 6	7 – 6	9 – 0	10 – 0	10 – 0				
	26 – 0	1 – 0	2 – 6	4 – 6	6 – 0	7 – 6	8 – 6	10 – 0	10 – 6				
	27 - 1	1 – 0	3 – 0	5 – 0	6 - 6	8 - 0	9 – 6	10 - 6	11 - 0				
	18 – 0	1 – 6	4 – 0	5 – 0	6 – 0	6 – 6	7 – 6	8 – 0	8 – 6	8 – 6	8 – 6		
	20 – 0	2 – 6	5 – 0	6 – 0	7 – 0	7 – 6	8 – 6	9 – 0	9 – 6	9 – 6	9 – 6		
	21 – 3	3 – 0	5 – 6	6 – 6	7 – 6	8 – 0	9 – 0	9 – 6	10 – 0	10 – 6	10 – 6		
	22 – 0	1 – 6	4 – 6	5 – 6	6 – 6	7 – 6	8 – 6	9 – 6	10 – 0	10 – 0	10 – 6		
	23 – 9	2 – 0	5 – 0	6 – 6	7 – 6	8 – 6	10 – 0	10 – 6	10 – 6	11 – 0	11 – 0		
NJU16	24 – 0	1 – 0	3 – 6	5 – 6	6 – 6	8 – 0	9 – 0	10 – 0	10 – 6	11 – 0	11 – 0		
	26 – 1	1 – 0	5 – 0	6 – 6	7 – 6	9 – 0	10 – 0	11 – 0	11 – 6	12 – 0	12 – 0		
	28 – 0	1 – 0	2 – 6	4 – 6	6 – 6	8 – 0	9 – 6	11 – 0	11 – 0	12 – 0	12 – 0		
	30 – 0	1 – 0	3 – 6	5 – 6	7 – 6	9 – 0	10 – 6	12 – 0	12 – 6	13 – 0	13 – 0		

	20 – 0	1 – 6	3 – 6	4 – 6	5 – 6	6 – 0	7 – 0	8 – 0	8 – 0	8 – 6	8 – 6	9 – 0	9 – 0
	22 – 0	2 – 6	4 – 6	5 – 6	6 – 6	7 – 0	8 – 0	9 – 0	9 – 0	9 – 6	9 – 6	9 – 6	10 – 0
	23 – 6	3 – 0	5 – 6	6 – 0	7 – 0	7 – 6	8 – 6	9 – 6	9 – 6	10 – 0	10 – 6	10 – 6	10 – 6
	24 – 0	1 – 0	3 – 6	4 – 6	6 – 0	6 – 6	8 – 0	9 – 0	9 – 0	10 – 0	10 – 0	10 – 0	10 – 6
	26 – 0	2 – 0	4 – 6	5 – 6	7 – 0	7 – 6	9 – 0	10 – 0	10 – 0	11 – 0	11 – 0	11 – 0	11 – 6
NJU18	26 – 3	2 – 0	4 – 6	6 – 0	7 – 0	8 – 0	9 – 0	10 – 0	10 – 6	11 – 0	11 – 0	11 – 6	11 – 6
	28 – 0	1 – 0	3 – 6	5 – 0	6 – 6	7 – 6	9 – 0	10 – 0	10 – 6	11 – 0	11 – 6	11 – 6	12 – 0
	28 – 9	1 – 0	4 – 0	5 – 6	6 – 6	8 – 0	9 – 0	10 – 6	11 – 0	11 – 6	11 – 6	12 – 0	12 – 0
	30 – 0	1 – 0	1 – 0	2 – 6	4 – 6	6 – 0	7 – 6	9 – 6	10 – 0	11 – 0	11 – 0	11 – 6	11 – 6

NOTES on Table 9:

1. Table is based on a maximum uniform floor loading of 40 psf live and 25 psf dead load.
2. Table is applicable for joist spacing of 24 inches on center or less.
3. Joist span is based on the clear span, distance from inside of the end supports.
4. Hole location is the distance measured from the inside face of the nearest support to the edge of the hole.
5. The maximum hole depth must leave ¼ inch minimum of web material between the top and bottom of the hole and the flange.
6. The maximum allowable hole width (distance parallel to flange) shall be 1-1/2 times the hole depth.

Table 10 –ALLOWABLE ROUND HOLE LOCATION (ft-in.) for NJU SERIES[1,2,3,4,5]

Joist Type	Joist Span (ft-in.)	Hole Height (inches)											
		2	4	5	6	7	8 3/8	10	10 ½	12	12 1/2	13	14 1/2
		Allowable Hole Location (ft-in.)											
	12 - 0	1 – 0	2 – 6	3 – 0	3 – 6								
	14 – 0	2 – 0	3 – 6	4 – 0	4 – 6								
	14 – 1	2 – 0	3 – 6	4 – 0	5 – 0								
NJU10	15 – 9	1 – 6	3 – 0	4 – 0	4 – 6								
	16 – 0	1 – 0	2 – 0	3 – 0	4 – 0								
	17 – 3	1 – 0	2 – 6	3 – 6	4 – 6								
	18 – 0	1 – 0	1 – 0	2 – 0	3 – 0								
	20 - 0	1 – 0	1 – 6	3 – 0	4 – 0								
	14 - 0	1 – 6	2 – 6	3 – 6	4 – 0	4 – 6	5 – 0						
	16 – 0	2 – 6	3 – 6	4 – 6	5 – 0	5 – 6	6 – 0						
	16 - 7	2 – 6	4 – 0	4 – 6	5 – 6	6 – 0	6 – 0						
	18 – 0	1 – 6	3 – 6	4 – 0	5 – 0	5 – 6	6 – 0						
NJU12	18 – 7	2 – 0	3 – 6	4 – 6	5 – 0	5 – 6	6 – 0						
	20 – 0	1 – 0	3 – 0	4 – 0	4 – 6	5 – 6	6 – 0						
	20 – 4	1 – 0	3 – 0	4 – 0	5 – 0	5 – 6	6 – 6						
	22 – 0	1 – 0	1 – 0	2 – 6	3 – 6	4 – 6	5 – 6						
	23 – 6	1 – 0	2 – 0	3 - 0	4 – 0	5 – 0	6 – 0						
	16 – 0	1 – 0	1 – 6	2 – 0	3 – 0	3 – 6	5 – 0	6 – 6	7 – 0				
	18 – 0	1 – 0	2 – 6	3 – 0	4 – 0	4 – 6	6– 0	7 – 6	8 – 0				
	19 – 2	1 – 6	3 – 0	3 – 6	4 – 6	5 – 6	6– 6	8 – 0	8 – 6				
	20 – 0	1 – 0	1 – 6	2 – 6	3 – 0	4 – 0	5 – 6	7 – 6	8 – 6				
NJU14	21 – 5	1 – 0	2 – 0	3 – 0	4 – 0	5 – 0	6 – 6	8 – 6	9 – 0				
	22 – 0	1 – 0	1 – 0	1 – 6	2 – 6	3 – 6	5 – 6	8 – 0	8 – 6				
	23 – 6	1 – 0	1 – 0	2 – 0	3 – 6	4 – 6	6 – 6	8 – 6	9 – 6				
	26 – 0	1 – 0	1 – 0	1 – 0	1 – 6	3 – 0	5 – 0	8 – 0	9 – 0				
	27 - 1	1 – 0	1 – 0	1 – 0	1 - 6	3 - 6	5 – 6	8 - 6	9 - 6				

NJU16	18 – 0	1 – 0	2 – 6	3 – 6	4 – 0	4 – 6	5 – 6	6 – 6	7 – 0	7 – 6	7 – 6		
	20 – 0	1 – 6	3 – 6	4 – 6	5 – 0	6 – 0	6 – 6	7 – 6	8 – 0	8 – 6	8 – 6		
	21 – 3	2 – 6	4 – 0	5 – 0	5 – 6	6 – 6	7 – 6	8 – 6	8 – 6	9 – 0	9 – 6		
	22 – 0	1 – 0	2 – 6	3 – 6	4 – 6	5 – 6	6 – 6	7 – 6	8 – 0	8 – 6	9 – 0		
	23 – 9	1 – 0	3 – 6	4 – 6	5 – 6	6 – 6	7 – 6	8 – 6	9 – 0	9 – 6	10 – 0		
	24 – 0	1 – 0	1 – 6	2 – 6	4 – 0	5 – 0	6 – 6	7 – 6	8 – 0	9 – 0	9 – 6		
	26 – 1	1 – 0	2 – 6	3 – 6	5 – 0	6 – 0	7 – 6	8 – 6	9 – 0	10 - 0	10 – 6		
	28 – 0	1 – 0	1 – 0	1 – 0	3 – 0	4 – 0	6 – 0	7 – 6	8 – 0	9 - 6	10 - 0		
	30 – 0	1 – 0	1 – 0	2 – 0	4 – 0	5 – 0	7 – 0	8 – 6	9 – 0	10 – 6	11 – 0		
NJU18	20 – 0	1 – 0	1 – 0	1 – 6	2 – 0	2 – 6	3 – 6	4 – 6	5 – 0	6 – 0	6 – 6	7 – 0	8 – 0
	22 – 0	1 – 0	2 – 0	2 – 6	3 – 0	3 – 6	4 – 6	5 – 6	6 – 0	7 – 0	7 – 6	8 – 0	9 – 0
	23 – 6	1 – 6	2 – 6	3 – 0	3 – 6	4 – 6	5 – 0	6 – 6	6 – 6	8 – 0	8 – 6	8 – 6	10 – 0
	24 – 0	1 – 0	1 – 0	1 – 0	1 – 6	2 – 6	3 – 6	5 – 0	5 – 6	7 – 0	7 – 6	8 – 0	9 – 6
	26 – 0	1 – 0	1 – 0	2 – 0	2 – 6	3 – 6	4 – 6	6 – 0	6 – 6	7 – 6	8 – 6	9 – 0	10 – 6
	26 – 3	1 – 0	1 – 0	2 – 0	2 – 6	3 – 6	4 – 6	6 – 0	6 – 6	8 – 0	8 – 6	9 – 0	10 – 6
	28 – 0	1 – 0	1 – 0	1 – 0	1 – 0	2 – 0	3 – 6	5 – 0	5 – 6	7 – 6	8 – 0	8 – 6	10 – 6
	28 – 9	1 – 0	1 – 0	1 – 0	1 – 6	2 – 6	4 – 0	5 – 6	6 – 0	7 – 6	8 – 6	9 – 0	11 – 0
	30 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	1 – 0	2 – 6	3 – 6	5 – 6	6 – 6	7 – 0	9 – 6

NOTES on Table 10:

1. Table is based on a maximum uniform floor loading of 40 psf live and 25 psf dead load.
2. Table is applicable for joist spacing of 24 inches on center or less.
3. Joist span is based on the clear span, distance from inside of the end supports.
4. Hole location is the distance measured from the inside face of the nearest support to the center of the hole.
5. The maximum hole depth must leave ¼ inch minimum of web material between the top and bottom of the hole and the flange.

Rim Joists: When Nascor Joists are used as rim joists, the allowable uniform load along the top flange of the joist shall be as indicated in **Table 4**.

Allowable end reactions associated with end-bearing lengths of both 1.5 inches and 2.5 inches, see **Table 2**. Joist under load bearing walls that run perpendicular to the joist shall have full-depth blocking panels or squash block members to transfer gravity loads from above to the wall or foundation below.

Continuous lateral support of the top (compression) flange of the Nascor joist shall be provided using diaphragm sheathing attached to the top flange or an equivalent. Joist ends must be restrained to prevent rollover. This is normally provided by diaphragm sheathing attached to the top flange and to an end wall or shear transfer panel capable of transferring a force of 50 pounds per foot. Blocking or cross bracing providing equivalent strength is permitted to be used.

Joist which qualify as repetitive members according to the applicable code are permitted to have allowable bending moment increased 7 percent.

TESTS AND RESULTS

Tests submitted and on file with the department include:

1. Warnock Hersay Professional Services Ltd. to satisfy the requirement for an unbiased, third party, Quality Assurance Program of inspection and testing.
2. Structural test data, structural calculations and quality control data pertaining to the Nascor Joist in accordance with ASTM D5055-92 as follows: M.O.I., EI and Shear Constant, Bending and Stiffness, Shear Capacities, Bearing Capacities, Creep, Compression Capacities, Bending and Stiffness Tests with Web Openings, and Deflection Ratios.
3. Nascor Incorporated Quality Control Manual for Nascor NJ, NJU and NJH Series Joists.
4. Nascor NJ, NJU and NJH Series Joists are manufactured at Nascor's Assembly Plant in Calgary, Alberta and at All-Fab Building Components in Stony Mountain, Manitoba.

All analysis of qualification test data and derivation of allowable design properties are signed and sealed.

LIMITATIONS OF APPROVAL

The scope of this evaluation is limited to the evaluation of the ability of Nascor Joists to resist gravity loads. The transfer and resistance of the Nascor Joists to another load such as wind, seismic and soil is beyond the scope of this evaluation.

Installation: Installation of Nascor NJ, NJU and NJH Series Joist shall be in accordance with the manufacturers published installation instructions and this approval. If a conflict between the manufacturer's instructions and this report occur, the conditions set forth in this approval shall govern.

Identification: All Nascor NJ, NJU and NJH Series Joist shall be identified by means of a stamp indicating the manufacturer's name and/or trademark, plant number, the product trade name, joist series and depth and the third-party inspection agency logo.

An expanded floor load table for the NJ, NJU and NJH Series Joists is on file with the department. The floor load table may be used without submittal of calculations provided that the following information is shown on the plans submitted for each project: approval number, series number identification, spans, spacing, loading conditions, bearing details and other information when required by **s. Comm 20.18 or 50.12** of the current Wisconsin Administrative Uniform Dwelling Code (for 1 & 2 family dwellings) and current Wisconsin Administrative Building Code, respectively.

Table 3 is based on simple span uniformly distributed load conditions for floors. Any variation will require submittal of calculations without the use of the load tables for that portion of the project when required by **s. Comm 20.18 or 50.12.** Further, applications not covered by this approval and requiring special considerations may be handled by contacting Nascor's Incorporated Engineered Lumber Technical Services for guidance.
The Nascor NJ, NJU and NJH Series Joists are approved for the moment and shear values shown in **Table 1**. Cumulative effects of short-term loads, such as snow, shall be considered in determining the duration of the load. For snow load, no greater duration of load factor than 1.15 shall be used.

The design properties are for dry-use conditions and under no circumstances shall the joist be permanently exposed to the weather.

Nascor joist flanges shall not be cut except as noted in this approval for birds mouth cuts of rafters. Hole cuts are permitted in the web in accordance with **Tables 5-10**.

Nascor Incorporated's descriptive literature indicating joist composition, dimensions, installation details including locations and details of blocking, bridging, joist cuts and this evaluation must be furnished upon request to code authorities having jurisdiction.

Requirements related to floor/ceiling assemblies other than specifically mentioned in this approval shall comply with the requirements of the code. For all installations, the manufacturer of the Nascor joists shall provide instructions, to the user of this evaluation, that describe safe and proper product handling and installation.

The use of pressure-treated lumber as part of the I-Joist assembly is beyond the scope of this evaluation.

Where required by the code, or when allowable spans are outside the spans allowed in **Table 3**, engineering calculations signed and sealed by a registered design professional shall be provided. The calculations shall accompany the permit application on structures using the Nascor Joists, and actual deflection shall be calculated by means of the formula (See **Table 1**, Notes).

Loads within a distance "d" from the support, where "d" equals the joist depth, shall not be excluded form the vertical shear design of the Nascor Joists.

Structural design loads and maximum allowable deflections shall be in accordance with **Chapter 53** of the current edition of the Wisconsin Administrative Building and Heating, Ventilating and Air Conditioning Code**.**

Structural design loads and maximum allowable deflections shall be in accordance with **Chapter 21** of the current Wisconsin Administrative Uniform Dwelling Code (for 1 & 2 family dwellings).

Structural design loads and maximum allowable deflections shall be in accordance with **Chapter 23** of the Wisconsin Amended ICC 2000 Code (**eff. 7/01/02**).

This approval will be valid through December 31, 2006, unless manufacturing modifications are made to the product or a re-examination is deemed necessary by the department. The Wisconsin Building Product Evaluation number must be provided when plans that include this product are submitted for review.

DISCLAIMER

The department is in no way endorsing or advertising this product. This approval addresses only the specified applications for the product and does not waive any code requirement not specified in this document.

Revision Date:
Approval Date: January 16, 2002 By: _____

Lee E. Finley, Jr.
Product & Material Review
Integrated Services Bureau

200203-W.doc